

Form PTO-1449
(REV. 8-83)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

02489.P015

SERIAL NO.

unassigned

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

APPLICANT

Varadarajan Srinivasan, et al.

FILING DATE

9-23-99

GROUP

unassigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

JB		T.V. Lakshman and D. Stiliadis, "High-Speed Policy-Based Packet Forwarding Using Efficient Multi-dimensional Range Matching," <u>SIGCOMM</u> , 1998, pp. 203-214.
JB		Xipeng Xiao and Lionel M. Ni, "Internet QoS: A Big Picture," <u>IEEE Network</u> , March/April 1999, pp. 8-18.
JB		"White Paper - Introduction to QoS Policies," <u>Stardust.com</u> , 1999, pp. 1-22.
JB		"Policy-Based Routing," <u>Cisco Systems, Inc.</u> , 1996, pp. 1-7.

EXAMINER

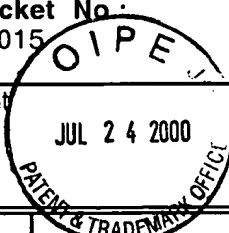
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DATE CONSIDERED

7/10/03

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1c584 U.S. PTO
09/406170
09/23/99

Form PTO-1449 (Modified)	Atty Docket No.: 02489.P015	Serial No.: 09/406,170
List of Patents and Publications Statement (Use several sheets if necessary)		Applicant: Varadarajan Srinivasan, et al.
		Filing Date: September 23, 1999

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Group 2700

REFERENCE DESIGNATION			U.S. PATENT DOCUMENTS			
Examiner Initials	Document No.	Class	Sub-Class	Filing date if appropriate		
	AA 5,649,149	Stormon et al.	365	435	08-01-1994	
	AB 5,818,873	Wall et al.	375	240	08-03-1992	
SB	AC 5,841,874	Kempke et al.	380	50	08-13-1996	
SB	AD 5,860,085	Stormon et al.	711	108	08-01-1994	
SB	AE 5,893,931	Peng et al.	711	206	01-15-1997	
SB	AF 5,930,359	Kempke et al.	380	9	09-23-1996	
SB	AG 3,602,899	Lindquist et al.	340	172.5	06-20-1969	
SB	AH 3,685,020	Meade	340	172.5	05-25-1970	
SB	AI 4,996,666	Duluk, Jr.	365	49	02-26-1991	
SB	AJ 5,440,709	Edgar	395	401	02-28-1994	
SB	AK 5,745,488	Thompson et al.	370	395	04-29-1996	
SB	AL 5,920,886	Feldmeier	711	108	03-14-1997	
SB	AM 5,946,704	Yoneda et al.	711	108	02-10-1995	
SB	AN 6,081,440	Washburn et al.	365	49	11-05-1998	
SB	AO 6,011,795	Varghese et al.	370	392	03-20-1997	
SB	AP 6,065,064	Satoh et al.	709	249	04-17-1998	


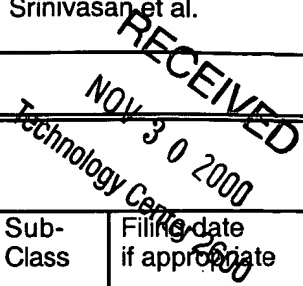
FOREIGN PATENT DOCUMENTS							
No.	Document No.	Date	Country	Class	Sub-Class	Trans-lation	
	AQ WO 98/12651	03-26-1998	WIPO				
	AR EP 0 381 249 A2	08-08-1990	Europe				
	AS EP 0 267 612 A2	05-18-1988	Europe				
	AT EP 0 872 802 A2	10-21-1998	Europe				
	AU WO 99/31581	06-24-1999	WIPO				

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
SB	AV	Pankaj Gupta and Nick McKeown, "Packet Classification on Multiple Fields," <u>SIGCOMM</u> (September 2, 1999), 14 pages.
SB	AW	V. Srinivasan, et al., "Packet Classification using Tuple Space Search," <u>SIGCOMM</u> (September 2, 1999), 12 pages.
SB	AX	MUSIC Semiconductors, Advance Information, "MUAA Routing CoProcessor (RCP) Family," (October 1, 1998), Rev. 1b, pages 1-16.
	AY	
	AZ	

Examiner <u>ABQ</u>	Date Considered <u>7/10/02</u>
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Modified)		Docket No.: 002489.P015		Serial No.: 09/406,170	
List of Patents and Publications Statement (Use several sheets if necessary)				Applicant: Varadarajan Srinivasan et al.	
				Filing Date: 9-23-99	

REFERENCE DESIGNATION		U.S. PATENT DOCUMENTS				
Examiner Initials		Document No.		Class	Sub-Class	Filing date if appropriate
	AA	4,845,668	Sano et al.	365	49	
	AB	5,010,516	Oates	365	49	
	AC	5,072,422	Rachels	365	49	
	AD	5,621,677	Jones	365	49	
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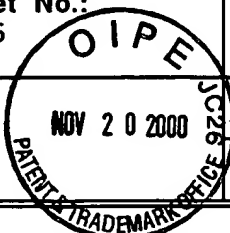
FOREIGN PATENT DOCUMENTS							
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	AT						
	AU						

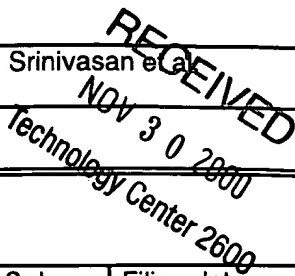
OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
	AV	Kanad Ghose, "Response Pipelined Cam Chips: The First Generation and Beyond", 7 th International Conference on VLSI Design, January 1994, pp. 365-368
	AW	Anthony McAuley et al., "A Self-Testing Reconfigurable CAM", IEEE Journal of Solid State Circuits, Vol. 26, No. 3, March 1991 pp. 257-261
<i>SB</i>	AX	Ian N. Robinson, "Pattern Addressable Memory", IEEE Micro, June 1992, pp. 20-30
<i>SB</i>	AY	GEC Plessey Semiconductors, "P2800 2K x 64 Bit Multi-Port Content Addressable Memory", Preliminary Information, February 1997, pp. 1-15
<i>SB</i>	AZ	GEC Plessey Semiconductors, "P2800 Multi-port Content Addressable Memory", Functional Product Specification GPS-FPS-2800-12, January 1996

Examiner <i>APR 2005</i>	Date Considered <i>7/10/03</i>
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Form PTO-1449 (Modified)		Docket No.: 02489.P015		Serial No.: 09/406,170	
List of Patents and Publications Statement (Use several sheets if necessary)				Applicant: Varadarajan Srinivasan et al	
				Filing Date: 9-23-99	





REFERENCE DESIGNATION			U.S. PATENT DOCUMENTS			
Examiner Initials	Document No.	Class	Sub-Class	Filing date if appropriate		
	AA					
	AB					
	AC					
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FOREIGN PATENT DOCUMENTS							
No.	Document No.	Date	Country	Class	Sub-Class	Trans-lation	
	AQ						
	AR						
	AS						
	AT						
	AU						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
SB	AV	Music Semiconductors, MU9C2480 LANCAM, Preliminary Data Sheet, August 25, 1995, pp. 1-24
SB	AW	Music Semiconductors, MU9C1480 LANCAM Handbook, November 1994
SB	AX	KLSI KE5B064A1 Address Processor Ver. 2.0.2 Preliminary (believed to be published late 1995 or early 1996)
SB	AY	KLSI KE5B064H Series Address Processor Ver. 1.0.1 (believed to be published in late 1995 or early 1996)
	AZ	

Examiner: <i>ABA</i>	Date Considered: <i>7/10/02</i>
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ABL

7/10/02

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Substitute For Form 1449A/PTO/CB 7 (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application No	09/406,170
		Filing Date	September 23, 1999
		First Named Inventor	V. Srinivasan, et al.
		Group Art Unit	2731
Examiner Name		Not yet assigned	
Sheet 1 of 4		Attorney Docket Number 002489.P015	

U.S. PATENT DOCUMENTS

Examiner Initials*	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate
	6,006,306	Haywood, et al.	12/21/99	
	6,000,008	Simsee	12/7/99	
	5,949,696	Throewitt	09/07/99	
	5,870,324	Helwig	02/09/99	
	5,818,786	Yoneda	10/06/98	
	5,706,224	Srinivasan, et al.	01/06/98	
	5,642,322	Yoneda	06/24/97	
	5,517,441	Dietz et al.	05/14/96	
	5,513,134	Cooperman et al.	04/30/96	
	5,491,703	Bamaby et al.	02/13/96	
	5,490,102	Jurbran	02/06/96	
	5,485,418	Hiraki et al.	01/16/96	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Patent Document			Class	Subclass	Translation? Yes/No
	Office or Country	Number	Date			
	WIPO	WO 98/12651 ✓	03-26-1998			
	Europe	EP 0 381 249 A2 ✓	08-08-1990			
	Europe	EP 0 267 612 A2 ✓	05-18-1988			
	Europe	EP 0 872 802 A2 ✓	10-21-1998			
	WIPO	WO 98/31581 ✓	06-24-1999			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), publisher, city and/or country where published (if title of the item known), (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	Translation? Yes/No
	Music Semiconductors, "MU9C1480 LANCAM" Advance Information, March 22, 1990, pp. 1-11	
	Music Semiconductors, "MUAA™ CAM Family" Advanced Information, February 24, 1998, Rev. 0, pp. 1-16.	
	Motorola Semiconductor Technical Data, "Advanced Information 16K X 64 CAM", MCM69C432, January 1996, pp. 4 pages	
	Advanced Micro Devices, "Final Am99C10A 256 x 48 Content Addressable Memory" Publication No. 08125, Rev. G, December 1992, pp. 1-21.	

Examiner Date Considered

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Examiner Signature	<i>LB Count</i>	Date Considered	7/6/03
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PTO/SB/08A (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute For Form 449A/PTO (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application No	09/406,170
		Filing Date	September 23, 1999
		First Named Inventor	V. Srinivasan, et al.
		Group Art Unit	2731
Examiner Name		Not yet assigned	
Attorney Docket Number		002489.P015	

U.S. PATENT DOCUMENTS

Examiner Initials*	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate
		Number			
		5,469,161	Bezek	11/21/95	
		5,455,576	Clark, II et al.	10/3/95	
		5,454,094	Montove	09/26/95	
		5,422,838	Lin	06/06/95	
		5,414,704	Spinney	05/09/95	
		5,383,146	Threewitt	01/17/95	
		5,319,763	Ho et al.	06/07/94	
		5,265,100	McClure et al.	11/23/93	
		5,239,642	Gutierrez et al.	08/24/93	
		5,226,005	Lee et al.	07/06/93	
		5,111,427	Kobayashi et al.	05/05/92	
		5,107,501	Zorian	04/21/92	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Patent Document			Class	Subclass	Translation? Yes/No
	Office or Country	Number	Date			
	Japan	08167295	6-25-96			
	EPO	0-660-332-A1				

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), publisher, city and/or country where published (if title of the item known), (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	Translation? Yes/No
	Takeshi Ogura et al., "A 4kbit Associative Memory LSI", IEEE Journal of Solid-State Circuit, Vol. SC-20, No. 6, December 1985, pp. 1277-1281.	
JB	Hiroshi Kadota et al., "An 8kbit Content-Addressable and Reentrant Memory", IEEE Journal of Solid-State Circuits, Vol. SC-20, No. 5, October 1985, pp. 951-956.	
	Simon R. Jones et al., "A 9-kbit Associative Memory for High-Speed Parallel Processing Applications", IEEE Journal of Solid-State Circuits, Vol. 23, No. 2, April 1988, pp. 543-548.	
JB	Landrock et al., "Associative Storage Module", IBM Technical Disclosure Bulletin, Vol. 25, No. 5, October 1992, pp. 2341-2342.	

Examiner S. B. Count	Date Considered 2/10/03
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Date
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PTO/SB/08A (10-96)

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Substitute For Form 1449 APTO (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known	
	Application No	09/406,170
	Filing Date	September 23, 1999
	First Named Inventor	V. Srinivasan, et al.
	Group Art Unit	2731
Examiner Name	Not yet assigned	
Sheet 3 of 4	Attorney Docket Number	002489.P015

U.S. PATENT DOCUMENTS

Examiner Initials*	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate
		Number			
		5,053,991	Burrows	10/1/91	
		5,051,948	Watabe et al.	09/24/91	
		5,036,486	Noguchi et al.	07/30/91	
		5,014,195	Farrell et al.	05/07/91	
		4,975,873	Nakabayashi et al.	12/04/90	
		4,959,811	Szozepanek	09/25/90	
		4,958,377	Takahashi	09/18/90	
		4,928,260	Chuang et al.	05/22/90	
		4,903,234	Sakaraba et al.	02/20/90	
		4,813,002	Joyce et al.	03/14/89	
		4,791,606	Threewitt et al.	12/13/88	
		4,785,398	Joyce et al.	11/15/88	
		4,780,845	Threewitt	10/25/88	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Patent Document			Class	Subclass	Translation? Yes/No
	Office or Country	Number	Date			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), publisher, city and/or country where published (if title of the item known). (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s).				Translation? Yes/No
	10	Soo-ik Chae et al., "Content-Addressable Memory for VLSI Pattern Inspection", IEEE Journal of Solid-State Circuits, Vol. 23, No. 1, February 1988, pp. 74-78.			
	11	Yong-Chui Shin et al., "A Special Purpose Content-Addressable Memory Chip for Real Time Image Processing", IEEE Journal of Solid-State Circuits, Vol. 27, No. 5, May 1992, pp. 737-744.			
	12	Sergio R. Ramirez-Chavez, "Encoding Don't Cares in Static and Dynamic Content-Addressable Memories", Transaction Briefs, IEEE Transactions on Circuits and System-II: Analog and Digital Signal Processing, Vol. 39, No. 8, August 1992, pp. 575-578			
	13	Keikichi Tamaru, "The Trend of Functional Memory Development", INVITED PAPER Special Issue on LSI Memories, IEICE Trans. Electron, Vol. E76-C, No. 11, Nov. 1993, pp. 1545-1554			
	14	Pankaj Gupta et al., "Routing Lookups in Hardware at Memory Access Speeds", Proc. Infocom, April 1998, 8 pgs.			
	15	Masayoshi Kobayashi et al., "A 50Mpps Longest Prefix Match Search Engine LSI for Multi-gigabit IP Forwarding", Technical Report of IEICE IN08-119, November 1998, pp. 7-12.			

Examiner 	Date Considered 2/10/03
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Substitute For Form 149A/PTO (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known		
		Application No	09/406,170	
		Filing Date	September 23, 1999	
		First Named Inventor	V. Srinivasan, et al.	
		Group Art Unit	2731	
		Examiner Name	Not yet assigned	
Sheet 4 of 4		Attorney Docket Number	002489.P015	

U.S. PATENT DOCUMENTS				
Examiner Initials*	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate
	4,758,982	Price	07/19/88	
	4,747,080	Yamada	05/24/88	
	4,670,858	Almy	06/02/87	
	4,656,626	Yudichak et al.	04/07/87	
	4,646,271	Uehiyama	02/24/87	
	4,523,301	Kadota	06/11/85	
	4,472,805	Wacyk et al.	09/18/84	
	4,244,033	Hattori	04/06/81	
	4,112,502	Seheuneman	9/05/78	
	3,868,642	Sachs	2/25/75	
	3,675,211	Raviv	7/04/72	
	3,353,159	Lee, III	11/14/67	
	3,257,646	Roth	6/21/66	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Foreign Patent Document			Class	Subclass	Translation? Yes/No
	Office or Country	Number	Date			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), publisher, city and/or country where published (if title of the item known). (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s).	Translation? Yes/No
	Masao Akata, "A Scheduling Content-Addressable-Memory for ATM Space-Division-Switch Control", IEEE International Solid-State Circuits Conference, Feb. 1991, New York.	

Examiner	Date Considered
No Reference considered	

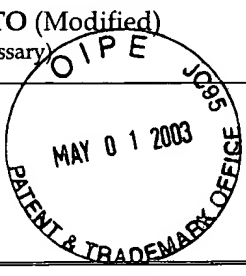

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
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Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 002489.P015		Application Number: 09/406,170		
		First Named Inventor: V. Srinivasan		RECEIVED MAY 02 2003		
		Filing Date: 9/23/99				
U.S. PATENT DOCUMENTS						
Technology Center 2600						
Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
		6,362,993		Henderson et al.	3/26/02	
		6,289,414		Feldmeier et al.	9/11/01	
		6,175,514		Henderson et al.	1/16/01	
		6,069,573		Clark, II et al.	5/30/00	
		5,999,435		Henderson et al.	12/7/99	
		5,978,885		Clark, II	11/2/99	
		5,828,324		Clark, II	10/27/98	
		5,406,508		Hayashibara	4/11/95	

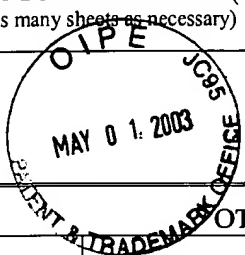
FOREIGN PATENT DOCUMENTS								
Exam. Initial *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
		PCT	WO01/11630A1		Fast-Chip Incorporated	2/15/01		

Examiner Signature		Date Considered	7/10/03
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 002489.P015	Application Number: 09/406,170
		First Named Inventor: V. Srinivasan	RECEIVED
		Filing Date: 9/23/99	MAY 02 2003
OTHER ART - NO PATENT LITERATURE DOCUMENTS			Technology Center 2600
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
JB		Patent Abstracts of Japan, Application No. 09279525, Filed September 26, 1997.	

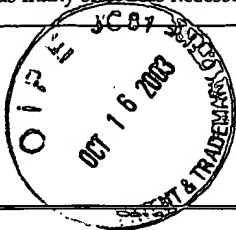
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U.S. PATENT DOCUMENTS

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J		5,339,268		Machida	8/16/94	
J		5,465,335		Anderson	11/7/95	
J		5,467,319		Nusinov et al.	11/14/95	
J		5,475,825		Yonezawa et al.	12/12/95	
J		5,615,135		Waclawsky et al.	3/25/97	
J		5,619,676		Fukuda et al.	4/8/97	
J		5,740,098		Adams et al.	4/14/98	
J		5,752,069		Roberts et al.	5/12/98	
J		6,065,064		Satoh et al.	5/16/00	
J		5,319,590		Montoye	6/7/94	

FOREIGN PATENT DOCUMENTS

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
J		EP	0944093A1		NEC Corporation	9/2/99		

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J		5,440,715		Wyland	8/8/95	
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J		5,598,115		Holst	1/28/97	
J		5,642,114		Komoto	6/24/97	
J		5,646,878		Samra	7/8/97	
J		5,699,288		Kim et al.	12/16/97	
J		5,933,363		Shindo	8/3/99	
J		5,940,852		Rangasayee	8/17/99	

FOREIGN PATENT DOCUMENTS

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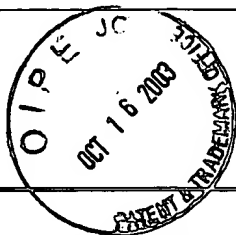
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✓		6,044,005		Gibson et al.	3/28/00	
✓		6,108,227		Voelkel	8/22/00	
✓		6,144,574		Kobayashi et al.	11/7/00	
✓		6,181,698		Hariguchi	1/30/01	
✓		6,237,061		Srinivasan	5/22/01	
✓		6,266,262		Washburn et al.	7/24/01	

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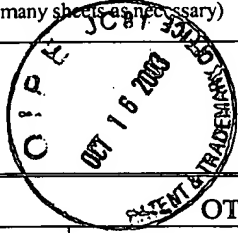
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OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
JB		Waldvogel et al. "Scalable High-Speed Prefix Matching", ACM Transactions on Computer Systems (TOCS), Vol. 19, pages 440-482, Nov. 2001.	
JB		Srinivasan et al., "Fast Address Lookups Using Controlled Prefix Expansion", ACM Transactions on Computer Systems (TOCS), Vol. 17, pages 1-40, Feb. 1999.	
JB		Waldvogel et al., "Scalable High Speed IP Routing Lookups", Proceedings of the ACM SIGCOMM '97 Conference on Applications, Technologies, Architectures, and Protocols for Computer Communication, pages 1997.	
JB		Engineers, Technical Report of IEICE, IN08-119 (1998-11), pages 7-12.	
JB		Japanese Patent Abstract, Publication No. 04021997A, published January 24, 1992, 1 page.	
JB		Japanese Patent Abstract, Publication No. 05182472A, published July 23, 1993, 1 page.	
JB		MOSAID, The Next Generation of Content Addressable Memories, MOSAID Technologies Incorporated, September 1999, 8 pages.	
JB		C.C. Wang and I.H. Horng, "Realization of Bidirection Associative Memory Using a Pseudo-Parallel Searching Approach, 1995 IEEE International Conference on Neural Networks, Vol. 3, pp. 1502-1507, December 1995.	

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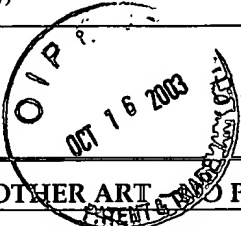
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OTHER ART AND PATENT LITERATURE DOCUMENTS			
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LB		Kobayashi, M. et al., "A Processor Based High-Speed Longest Prefix Match Search Engine", IEEE Workshp on High Performance Switching and Routing, page(s) 233-239, 2001.	
LB		Kobayashi, M. et al. "A Longest Prefix Match Search Engine For Multi-Gigabit IP Processing", IEEE International Conference on Communications, Vol. 3, page(s) 1360-1364, 2000.	
LB		Hayashi, T. et al., "High-Speed Table Lookup Engine for Ipv6 Longest Prefix Match", Global Telecommunications Conference, Vol. 2, page(s) 1576-1581, 1999.	
LB		Huang et al., "A Novel IP-Routing Lookup Scheme and Hardware Architecture For Multigigabit Switching Routers", IEEE Journal Selected Areas in Communications, pp(s) 1093-1104, 06/1999.	
LB		Huang et al., "A Fast Routing Lookup Scheme For Gigabit Switching Routers", Eighteenth Annual Joint Conference of the IEEE Computer and Communications Societies, Vol. 3, pp(s) 1429-1436, 1999.	
LB		High Speed Address Search Engine," Document No. S13450EJ3V0PF00 (3 rd edition), published February 1999, ©NEC Corporation, 2 pages.	

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		First Named Inventor: V. Srinivasan	
		Filing Date: 9/23/99	

U.S. PATENT DOCUMENTS

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		Number Code ²	Kind (If known)			
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		5,072,422		Rachels	12/10/91	
		5,621,677		Jones	4/15/97	
		4,758,982		Price	7/19/88	
		4,747,080		Yamada	5/24/88	
		4,670,858		Almy	6/2/87	
		4,656,626		Yudichak et al.	4/7/87	

FOREIGN PATENT DOCUMENTS

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		Japan	08167295		Kawasaki Steel Corporation	6/25/96		

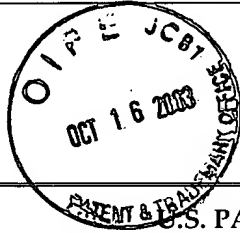
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		4,646,271		Uchiyama Technology Center	2/24/87	
		4,523,301		Kadota	6/11/85	
		4,472,805		Wacyk et al.	9/18/84	
		4,244,033		Hattori	1/6/81	
		4,112,502		Scheuneman	9/5/78	
		3,868,642		Sachs	2/25/75	
		3,675,211		Raviv	7/4/72	
		3,353,159		Lee, III	11/14/67	

FOREIGN PATENT DOCUMENTS								
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		5,036,486		Noguchi et al.	7/30/91	
		5,014,195		Farrell et al.	5/7/91	
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		4,959,811		Szezepanek	9/25/90	
		4,958,377		Takahashi	9/18/90	

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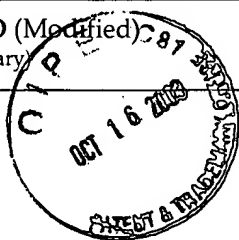
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		5,455,576		Clark, II et al.	10/3/95	

FOREIGN PATENT DOCUMENTS

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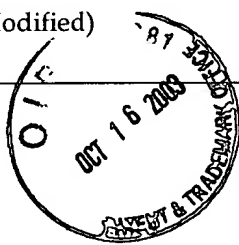
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JB		5,454,094		Montove	9/26/95	
JB		5,422,838		Lin	6/6/95	
JB		5,414,704		Spinney	5/9/95	
JB		5,383,146		Threewitt	1/17/95	
JB		5,319,763		Ho et al.	6/7/94	
JB		5,265,100		McClure et al.	11/23/93	
JB		5,239,642		Gutierrez et al.	8/24/93	
JB		5,226,005		Lee et al.	7/6/93	

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FOREIGN PATENT DOCUMENTS

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JB		PCT	WO98/12651		Motorola Inc.	3/26/98		

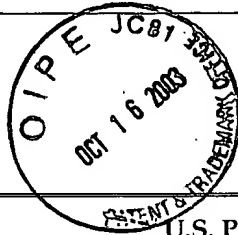
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Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 002489.P015	Application Number: 09/406,170
	First Named Inventor: V. Srinivasan	
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		Number Code ²	Kind (If known)			
		5,111,427		Kobayashi et al.	5/5/92	
		5,107,501		Zorian	4/21/92	
		6,006,306		Haywood, et al.	12/21/99	
		6,000,008		Simcoe	12/7/99	
		5,949,696		Threewitt	9/7/99	
		5,870,324		Helwig	2/9/99	
		5,818,786		Yoneda	10/6/98	
		5,706,224		Srinivasan, et al.	1/6/98	

FOREIGN PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
		EP	0381249A2		NEC Corporation	8/8/90		

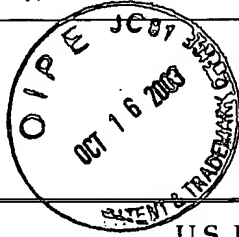
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UB		5,642,322		Yoneda Technology Center 2600	6/24/97	
UB		5,517,441		Dietz et al.	5/14/96	
UB		5,513,134		Cooperman et al.	4/30/96	
UB		5,491,703		Barnaby et al.	2/13/96	
UB		5,490,102		Jubran	2/6/96	
UB		5,485,418		Hiraki et al.	1/16/96	
UB		6,362,993		Henderson et al.	3/26/02	
UB		6,175,514		Henderson et al.	1/16/01	

FOREIGN PATENT DOCUMENTS

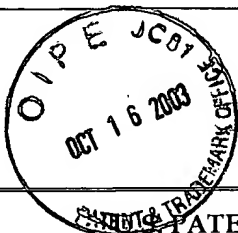







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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
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

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		First Named Inventor: V. Srinivasan				
		Filing Date: 9/23/99				
PATENT DOCUMENTS						
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		Number Code ²	Kind (If known)			
		6,069,573		Clark, II et al.	5/30/00	
		5,999,435		Henderson et al.	12/7/99	
		5,978,885		Clark, II	11/2/99	
		5,828,324		Clark, II	10/27/98	
		5,406,508		Hayashibara	4/11/95	
		5,649,149		Stormon et al.	7/15/97	
		5,818,873		Wall et al.	10/6/98	

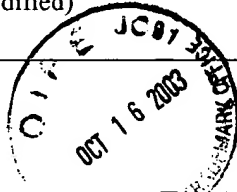
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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
		EP	0872802A2		NEC Corporation	10/21/98		
		PCT	WO99/31581		IP Semiconductors	6/24/99		


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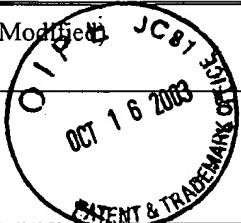
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		First Named Inventor: V. Srinivasan	RECEIVED OCT 20 2003 Technology Center 2600
		Filing Date: 9/23/99	
OTHER ART - NO PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
JB		Kanad Ghose, "Response Pipelined Cam Chips: The First Generation and Beyond," 7 th International Conference on VLSI Design, January 1994, pp. 365-368.	
JB		Anthony McAuley et al., "A Self-Testing Reconfigurable CAM", IEEE Journal of Solid-State Circuits, Vol. 26, No. 3, March 1991 pp. 257-261.	
JB		Masao Akata, "A Scheduling Content-Addressable Memory for ATM Space Division Switch Control", IEEE International Solid-State Circuits Conference, Feb. 1991, New York.	
JB		Sook-ik Chae et al., "Content-Addressable Memory for VLSI Pattern Inspection", IEEE Journal of Solid-State Circuits, Vol. 23, No. 1, February 1988, pp. 74-78.	
JB		Yong-Chui Shin et al., "A Special-Purpose Content Addressable Memory Chip for Real-Time Image Processing", IEEE Journal of Solid-State Circuits, Vol. 27, No. 5, May 1992, pp. 737-744.	
JB		Pankaj Gupta et al., "Routing Lookups in Hardware at memory Access Speeds", Proc. Infocom, April 1998, 8 pgs.	

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Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
SB		Masayoshi Kobayashi et al., "A 50Mpps Longest Prefix Match Search Engine LSI for Multi-gigabit IP Forwarding", Technical Report of IEICE IN08-119, November 1998, pp. 7-12.	
SB		Takeshi Ogura et al., "A 4kbit Associative Memory LSI", IEEE Journal of Solid State circuit, Vol. SC-20, No. 6, December 1985, pp. 1277-1284.	
SB		Simon R. Jones et al., "A 9-kbit Associative Memory for High Speed Parallel Processing Applications", IEEE Journal of Solid-State Circuits, Vol. 23, No. 2, April 1988 pp. 543-548.	

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